Case No.: 56210US004

## Remarks

Entry of the Amendment and favorable reconsideration of the application is respectfully requested in light of the amendment and the following detailed discussion. Claims 1 to 19 are pending. Claims 1 and 19 are amended. Support for the amendment to claims 1 and 19 ("bonding directly") can be found at least in the specification as originally filed. For example:

Location in Specification	Supporting Language
Page 2, line 5	"A multi-layer structure includes a fluoropolymer bonded to a substrate."
Page 2, line 10	"a method of bonding a fluoropolymer to a substrate includes"
Page 2, line 13	"a method of bonding a fluoropolymer to a substrate includes"
Page 4, lines 23-25	"Actinic radiation is electromagnetic radiation having a wavelength capable of affecting bonding between the fluoropolymer and the substrate in the presence of the bonding composition."
Figure 1 and Page 4, lines 12-13	"Bonding composition 40 contacts the interface between fluoropolymer layer 20 and substrate 30."

Case No.: 56210US004

#### **Specification**

As requested in the Office Action, the applicants have updated the cross reference information in the first paragraph of the specification to indicate that application 09/862,022 has now issued as U.S. Patent No. 6,630,047.

#### **§ 112 Rejections**

Claims I-17 and 19 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. In this regard, the Examiner has taken the position that there is no explicit support in the disclosure as originally filed for the limitation that the fluoropolymer shares at least one covalent bond with the substrate. However, the Examiner acknowledges that "there is support in the disclosure for the fluoropolymer to be bonded to the substrate."

While applicants continue to assert that the disclosure provides an adequate written description for the previously amended claims, in order to expedite prosecution claims 1 and 19 have been amended to delete the limitation that the fluoropolymer shares at least one covalent bond with the substrate, and to instead require that a surface of the fluoropolymer is bonded directly to a surface of the substrate. The disclosure as originally filed clearly provides support for such a limitation, and claims 1-17 and 19 fully comply with the written description requirement of 35 U.S.C. §112, first paragraph.

In addition, claim 18 stands rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner asserts that no support could be found in the disclosure as originally filed for the limitation that the fluoropolymer surface is substantially free of fluorosurfactant. The Examiner cites *Ex parte Grasselli*, 231 USPQ 393, for the proposition that the addition of a negative limitation which did not appear in the disclosure as originally filed introduces a new concept and violates the description requirement of 35 U.S.C. 112.

However, in rejecting a claim under the first paragraph of 35 U.S.C. 112 for lack of adequate descriptive support, it is incumbent upon the examiner to establish that the originally-filed disclosure would not have reasonably conveyed to one having ordinary skill in the art that an applicant had possession of the claimed subject matter. Ex parte Parks, 30 USPO2d 1234,

Case No.: 56210US004

1236 (BdPatApp&Int 1993) (citation omitted). Moreover, adequate description under the first paragraph of 35 U.S.C. 112 does not require literal support for the claimed invention. *Id.* (citations omitted). Rather, it is sufficient if the originally filed disclosure would have conveyed to one having ordinary skill in the art that an applicant had possession of the concept of what is claimed. *Id.* (citations omitted). In the *Parks* decision, it was concluded that "it cannot be said that the originally filed disclosure would not have conveyed to one having ordinary skill in the art the concept of effecting decomposition at an elevated temperature in the absence of a catalyst." *Id.* at 1238. This was despite the fact that the application never explicitly stated that a catalyst was not used,

Similarly, the present application reasonably conveys to one skilled in the art that the inventors had possession of the invention now defined by claim 18; that is, a treated fluoropolymer substrate suitable for bonding directly to a polymeric substrate comprising a surface exposed to a combination of a light-absorbing compound and an electron donor and actinic radiation wherein the fluoropolymer substrate surface is substantially free of fluorosurfactant. The application describes specific examples in which a fluorosurfactant is not employed. As a result, in a manner closely analogous to the *Parks* case, one having ordinary skill in the art would readily appreciate that applicants had possession of the concepts set forth in claim 18. This claim is thus in full compliance with 35 U.S.C. §112, first paragraph.

# §102/§103 Rejections

According to the MPEP, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." See MPEP 2131 (quoting Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631) (emphasis added). Furthermore, "[t]o establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." See MPEP 2143 (emphasis added).

Case No.: 56210US004

Claim 18 relates to a treated fluoropolymer substrate suitable for bonding directly to a polymeric substrate. The fluoropolymer substrate comprises a surface exposed to a combination of a light-absorbing compound and an electron donor and actinic radiation. Also, the fluoropolymer substrate surface is substantially free of fluorosurfactant.

Claim 18 stands rejected under 35 USC § 102(b) as being anticipated by or, in the alternative, under 35 USC § 103(a) as obvious over Stoeppelmann (U.S. Patent 5,869,157) [hereinafter Stoeppelmann].

Stoeppelmann does not teach or describe the invention described in claim 18. In particular, Stoeppelmann does not teach, suggest or describe a treated fluoropolymer substrate suitable for bonding directly to a polymeric substrate. To the contrary, the polyamide "substrate" of Stoeppelmann is bonded directly to the intermediate layer described therein. That intermediate layer then interacts with the fluoropolymer to promote adhesion.

In addition, Stoeppelmann does not teach exposing the surface of a fluoropolymer substrate to a light-absorbing compound and an electron donor, together with actinic radiation. This failure of Stoeppelmann is acknowledged in the Office Action. However, it is further asserted that claim 18 is a product-by-process claim, and that the burden is therefore on the applicants to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art (citing MPEP §2113).

The disclosure as originally filed contains ample evidence in this regard. For instance, in Example 1, it is indicated that, "Comparative experiments showed that no adhesion between substrates and fluoropolymer films was observed prior to irradiation with the bonding composition present." See page 13, lines 15-17. On the other hand, adhesion was shown when the bonding compositions were combined with actinic radiation, as shown in Tables 1A and 1B. Thus, the product defined by claim 18 differs in kind from that described in Stoeppelmann.

For these reasons, the applicants respectfully submit that rejection of claim 18 under 35 USC § 102(b)/103(a) as being anticipated by or in the alternative obvious over Stoeppelmann has been overcome, and kindly request that this rejection be withdrawn.

Case No.: 56210US004

### Conclusion

It is respectfully submitted that the application is in condition for allowance, and a favorable action to that end is courteously solicited. In the event the Examiner would prefer language other than that set forth in the claims, it is requested that a telephone interview be had to assist in expediting the prosecution of the application.

By:

Respectfully submitted

December 2, 2004

Date

Bran E. Szymanski, Reg. No.: 39,523

Telephone No.: (651) 737-9138

Office of Intellectual Property Counsel 3M Innovative Properties Company Facsimile No.: 651-736-3833